

arabica among the Foraminifera that I have examined, have no central canal, in which they thus decidedly differ from the spicules of the Siliceous Sponges.

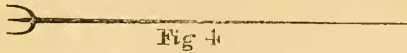


Fig 4

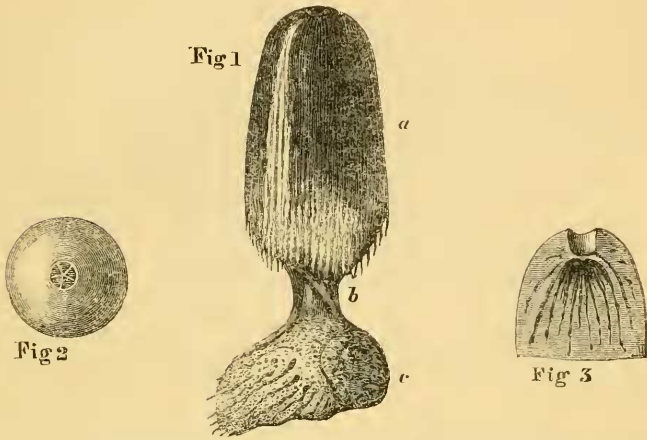


Fig 1

Fig 2

Fig 3

- Fig. 1. *Tethya dactyloidea*, natural size: *a*, body; *b*, pedicel; *c*, root, or filamentous extension into the sand.
 Fig. 2. Upper extremity, showing vent septated.
 Fig. 3. Vertical section of same, showing vent, cloacal cavity, and termination of excretory canals.
 Fig. 4. Trifid spicule.

VI.—Descriptions of several new Species of Nymphalidian Rhopalocera. By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

[Plate IX.]

THE following species would, according to the arrangement of Lepidoptera given in Westwood & Hewitson's 'Genera of Diurnal Lepidoptera,' belong to three distinct families; but these divisions, according to Bates, must be regarded as subfamilies of one large group.

Family Nymphalidæ (Westwood, *part.*), Bates.

Subfamily HELICONINÆ, Bates.

Genus HELICONIUS, Fabricius.

1. *Heliconius Zelinde*, sp. nov. Pl. IX. fig. 1.

♂. Alæ supra fuscæ, area basali nigrescente certo situ cærulescente :

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anticæ fascia (vel potius plaga) disco-discoidea ochraceo-flavida abbreviata ad nervulum primum medianum extensa, a venis nigris interrupta et a macula cuneiformi nigra in discocellulares disrupta; punctis tribus apud apicem oblique positis albidis, aliisque subanalibus cinereis squamosis: posticæ fascia costali ochracea, punctis tribus squamosis subapicalibus squamisque nonnullis analibus inter venas marginalibus cinereo-albis: corpus nigrum albido præ punctatum.

Alæ anticæ subtus area disco-costali fusca; area interna tricolorata, in cella grisea, infra venam medianam et nervulum primum pallide fusca, deinde pallide cinerea; plaga superna permagna sericeo-alba, maculis punctisve octo marginalibus incrementibus et quatuor decrementibus submarginalibus apicalibus niveis: posticæ fuscæ costa basali sericeo-flava; fascia indistincta costæ subparallela alteraque undata magis distincta margini anali subparallela, ferrugineis; maculis tribus subapicalibus lunularibus niveis, quatuorque marginalibus analibus squamosis cinereis: corpus nigro-fuscum, palpis ad basin albis; thorace flavo maculato; abdomine linea media squamosa ochraceo-albida.

Exp. alar. unc. $3\frac{1}{2}$.

Hab. West coast of America. B.M.

Presented to the Collection by Capt. Kellett and Lieut. Wood.

This species is allied to *H. fornarina*, Hewitson (from Guayaquil), but differs from it in many important particulars.

2. *Heliconius primularis*, sp. nov. Pl. IX. fig. 2.

Alæ anticæ supra fuscæ, area basali nitide cærulescente, fascia obliqua media alteraque abbreviata obliquis sulphureo-flavis a venis nigris intersectis, externa extus diffusa, intus bidentata: posticæ area basali cærulea nitida, apicali sulphureo-flava a venis nigris intersecta; margine externo anguste albicante, margine costali late fusca: corpus fuscum albo præ punctatum.

Alæ subtus pallidiores, maculis in anticis una, in posticis sex coccineis; area basali fusca; anticis linea subcostali flava, fasciaque externa ad marginem fere externum abrupte extensa, aliter velut supra: corpus fuscum, fronte nivea, palpis pedibusque primoribus lateraliter niveis.

Exp. alar. unc. 3, lin. 1.

Hab. Guayaquil and Rio Napo. B.M.

Purchased of Mr. Stevens.

Most nearly allied to *H. Eleuchia*, Hewitson (from Bogota), but differing in the form and width of the bands in the front wings, and in having the apical area of the hind wings brimstone-yellow in place of the narrow snowy border of *Eleuchia*.

3. *Heliconius Zobeide*, sp. nov. Pl. IX. fig. 3.

Alæ supra nigerrimæ omnino cinereo nitentes; fasciis duabus anticis

obliquis, abbreviatis, niveis, interna ad venam medianam late disrupta, externa a venis intersecta; posticæ ciliis niveis: corpus fuscum præ flavo punctatum.

Alæ subtus fuscæ, anticæ margine interno pallidiore sericeo; fasciis supernis niveis, stria subcostali basali et aliquando mediana flavis, costaque ad basin coccinea: posticæ striis duabus, inferiore multo longiore, punctisque duobus coccineis; ciliis niveis: corpus fuscum flavo maculatum; abdomine linea media, palpis pedibusque primoribus lateraliter flavis.

Exp. alar. unc. 3, lin. 5.

Hab. Para; B.M. Peru; Coll. Druce.

Presented to the National Collection by Mrs. J. P. G. Smith.

Nearly allied to *H. Antiochus*, Linnæus, and bearing nearly the same relation to it as exists between *H. arania*, Fabricius, and its Villa-Nova representative.

Subfamily SATYRINÆ, Bates.

Genus IDIOMORPHUS, Doumet.

4. *Idiomorphus Zinebi*, sp. nov. Pl. IX. fig. 4.

♂. Alæ supra fuscæ, certo situ roseo tinctæ; corpus fuscum.

Alæ subtus ochraceæ, roseo partim tinctæ, lineis tribus communibus obscurioribus, duabus mediis nigro-fuscis ad costam anticarum divergentibus; tertia pallidiore undulata submarginali: anticæ lineis duabus discoideis subbasalibus fuscis; apice obscuriore puncto uno alterove albis; plaga magna interna sericeo-cinerea: posticæ punctis septem ocellaribus albis discalibus: corpus ochraceum.

Exp. alar. unc. 2¼.

Hab. Gold Coast. Coll. Swanzy. Collected by Mr. Crocker.

Allied to *Idiomorphus Italus*, Hewitson (from Old Calabar), but very distinct; on the underside more like *I. Iccius*, Hewits.

Subfamily NYMPHALINÆ, Bates.

Genus DIADEMA, Boisduval.

5. *Diadema octocula*, sp. nov. Pl. IX. fig. 5.

♀. Alæ supra nigro-fuscæ: antice fascia postmedia obliqua ferruginea, ocelloque anali nigro indistincte pupillato fusco-ferrugineo cineto: posticæ fascia lata submarginali intus dentata ferruginea a venis nigris intersecta et puncta septem nigra ocellaria cæca inter venas includente; linea vix distinguenda obscure ferruginea undulata marginali; striola anali squamosa cærulea: corpus nigro-fuscum.

Alæ subtus pallidiores; fasciis striaque marginali supernis pallide roseo-albidis brunneo variis: anticæ characteribus quatuor discoideis subcostalibus, punctis quinque subapicalibus unaque majore

anali cæruleo-albidis nigro cinctis, linea submarginali nigra: posticæ ocellis septem nigris albido pupillatis; stria submarginali lunulari nigra, striola superna anali cæruleo-albida: corpus fuscum.

Exp. alar. unc. 3, lin. 4.

Hab. Island of Tologa. Coll. Druce.

Belongs to the *Pandarus* group, and would, according to Mr. Hewitson's views, be a local variation of that species. I have not, however, seen any indication of such links between the several well-marked forms of the *Pandarus* group as are to be met with in the case of (*Lasinassa*) *Bolina** (though even here I am not at present satisfied that we have only one species). The present species comes nearest to the insect figured by Mr. Hewitson (Proc. Zool. Soc. 1858, pl. 54. fig. 2), but differs, upon the upperside, in the ferruginous band and ocellus of the front wings, the darker margin and absence of internervular white spots in the hind wings.

Genus ROMALÆOSOMA, Blanchard.

6. *Romaleosoma Crockeri*, sp. nov. Pl. IX. fig. 6.

Cyparissa, Doubleday (nec Cramer).

♂ ♀. Alæ supra nigrae, area basali cærulescente; disco virescente, puncto anticis apicali albo; area anali posticis purpurascente: corpus cinereum, palpis fulvis.

Alæ subtus ochreo virescentes; maculis marginalibus inter venas geminatis nigris, margine ipso fuscescente: anticæ maculis tribus discoideis basalibus, nonnullisque disco-discoideis fasciam formantibus nigris fuscisque; area interna fuscescente: posticæ area costali persicaria maculis sub septem mediis serie annulari positis nigris; area inclusa virescente; area anali flavescente; ciliis omnibus albidis: corpus ochraceo-fulvum vel fulvo-cinereum; antennis nigris, fulvo clavatis.

Exp. alar. ♂ unc. 2, lin. 10; ♀ unc. 3, lin. 4.

Hab. Ashanti: ♂ ♀, B.M.; ♂, Coll. Swanzy.

♂ ♀. Purchased from the Collection of the Wesleyan Missionary Society.

♀. Presented by E. Doubleday, Esq.

This species has long stood in the National Collection as the *Cyparissa* of Cramer; the latter, however, is identical with the *Cato* of Fabricius. I have named it after Mr. Crocker, a gentleman acting as agent for Mr. Swanzy on the Gold Coast.

* The East-Indian (Moulmein &c.) form of this species represents the true *Bolina* of Clerck and Linnæus; the *Bolina* of recent authors will have to take the name *Misippus*, applied by Linnæus to the female of that species.

This gentleman, in consequence of his great taste for entomology, has devoted all his spare time to the capture and study of the West-African insects within his reach, and has sent home a collection which, if not rich in novelties, can at least boast several great rarities; among the latter may be mentioned a fine pair of the handsome *Diadema Dinarcha* of Hewitson, *Myrina Maesa*, Hewits., &c.

VII.—*Descriptions of some new Genera and Species of Aleyonoid Corals in the British Museum.* By Dr. J. E. GRAY, F.R.S., V.P.Z.S., &c.

MY nephew, Mr. W. A. Smith, sent to the British Museum some years ago a kind of Aleyonoid Coral which he collected in Garden Island near Sydney.

Telesco Smithii.

Coral erect, cylindrical, simple, slightly furcately branched, tubular, cartilaginous, with a thin, hard, crustaceous external coat, smooth below and marked with eight grooves and white streaks. Polype-cells short, subcylindrical, closely adpressed to the side of the stem, with eight grooves radiating from and deeper near the aperture. Tentacles and mouth of the polype quite retractile. Polype-cells variously disposed, even on the same stem, sometimes opposite on alternate sides of the stem, at others solitary and alternate, and at others there are solitary cells in the series between the opposite ones; rarely the polype-cell on one side of the opposite pair is produced into a short branch bearing cells like the stem; the lowermost cells sometimes project nearly horizontally.

Hab. Australia, Garden Island, Sydney. (W. A. Smith, Esq.) B.M.

It grows erect in tufts on shells and stones, 6–8 inches high.



Telesco Smithii.

The genus *Telesco* may be divided into three subgenera or genera, thus:—

I. TELESCO.—The coral shrub-like, furcately branched from